



Australian Cotton Comparative Analysis

2021 Crop



© Cotton Research and Development Corporation June 2014

ISBN 978-0-9923758-7-4

This work is copyright. Apart from any use permitted under the Copyright Act, 1968, no part may be reproduced by any process without the written permission of Cotton Research and Development Corporation.

Cotton Research and Development Corporation

2 Lloyd St (PO Box 282)

Narrabri NSW 2390

ABN 71 054 238 316

Executive Director: Ian Taylor
R & D Investment: Allan Williams
Business & Finance: Graeme Tolson
Telephone: 02 6792 4088
Facsimile: 02 6792 4400
Email: crdc@crdc.com.au
Website: www.crdc.com.au

Boyce Chartered Accountants

Moree	Phil Alchin	02 6751 2000	palchin@boyceca.com
	Jono Hart	02 6751 2000	jhart@boyceca.com
	Stacey Hart	02 6751 2000	shart@boyceca.com
	Tim Parish	02 6751 2000	tparish@boyceca.com
Cooma	Julie Schofield	02 6452 3344	jschofield@boyceca.com
Dubbo	Daniel Medway	02 6884 6499	dmedway@boyceca.com
	Scott Christian	02 6884 6499	schristian@boyceca.com
	Caroline Wilcher	02 6884 6499	cwilcher@boyceca.com
	Ben Calder	02 6884 6499	bcalder@boyceca.com
Goulburn	Kate Garrett	02 4821 1466	kgarrett@boyceca.com
Wagga Wagga	Linda Mackellar	02 6971 0600	lmackellar@boyceca.com
	Mel Dean	02 6751 0600	mdean@boyceca.com

Images courtesy of Cotton Australia

The Australian Cotton Comparative Analysis is a joint initiative between the Cotton Research & Development Corporation (CRDC) and Boyce Chartered Accountants to produce the industry benchmark for the economics of cotton growing in Australia. We are proud to present the analysis for the 2021 year which was a difficult year for Growers.

Boyce and CRDC reflected on the challenges that Growers were facing due to climatic conditions and developed a plan that allowed the database of historical data to be maintained and updated in line with careful use of resources during this difficult period for Growers. While there was no 2020 Australian Cotton Comparative Analysis Report, the limited production for 2020 and 2021 was recorded and in 2021 a summarised report prepared. We look forward to providing the full report again for the 2022 year based on the excellent year most growers have enjoyed.

The sample of participants this year again captures a representation from the different cotton-growing valleys. It is always our aim to increase the sample size of the analysis. If you are a grower and find this report instructive but do not currently participate in the analysis, we would welcome your involvement. Participation is free, and while we know that involvement does take some effort, we believe that this effort leads to a greater understanding of the numbers that drive your business with respect to other growers and trends within the industry.

As the industry continues to evolve, and as other studies on industry practices are finalised, we will continue to compare the results from those studies and these figures with a view to providing better information for the industry.

2021 Summarised Australian Cotton Comparative Analysis has been posted on the websites of Boyce Chartered Accountants (www.boyceca.com) and CRDC (www.crdc.com.au). We welcome the use of the figures contained in this report; however, it should be noted that the report or any part of it may not be published or reproduced without authorisation.

We look forward to discussing the report with you.



Jonathan Hart
Director
Boyce Chartered Accountants
Moree

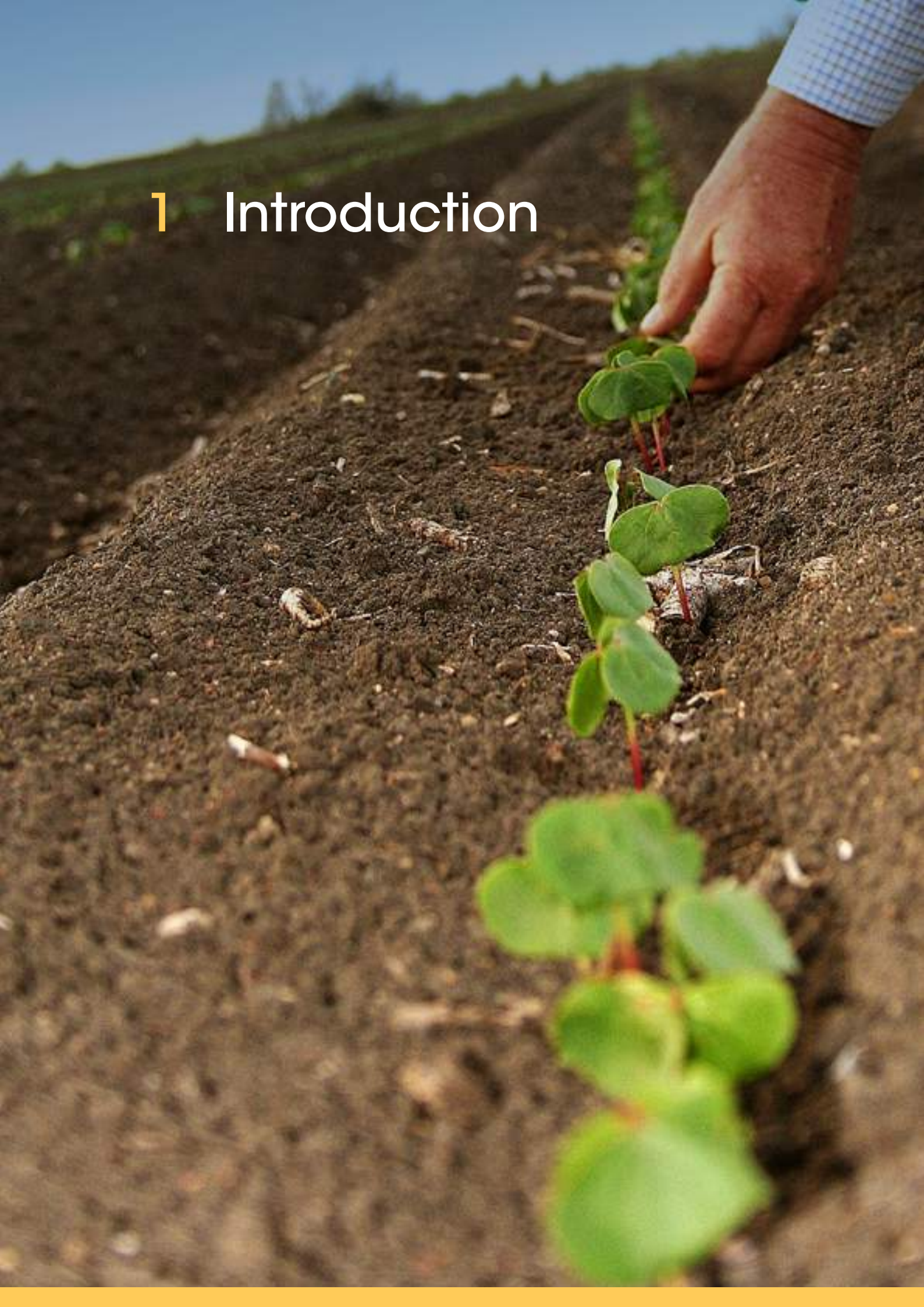


Ian Taylor
Executive Director
CRDC
Narrabri

2021 Australian Cotton Comparative Analysis Contents

1. Introduction	1
1.1 Our sample	3
1.2 The need to benchmark	3
2. Comparative Statistics	4
2.1 Summary	5
2.1.1 Comparison of average income and expense items for the 2021 year	
2.2 Average Growers per hectare	7
2.2.1 Graphs	
2.2.1.1 Comparison of average income and expense items	
2.2.1.2 Yield and trendline	
2.2.1.3 Value per bale and trendline	
2.2.2 Comparison of average income and expense items for the past 10 years	
2.3 Top 20% Growers per hectare	11
2.3.1 Graph	
2.3.1.1 Comparison of average income and expense items	
2.3.2 Comparison of average income and expense items for the past 10 years	
2.4 Top 20% Growers versus average Growers per hectare	14
2.4.1 Graphs	
2.4.1.1 Comparison of yield	
2.4.2 Comparison of Top 20% Growers and Average Growers for the past five years	
3. Appendices	17
Appendix A – Definition of terms	
Appendix B – Guide to income and expense allocations	

1 Introduction



Introduction

The 2021 Australian Cotton Comparative Analysis (ACCA) is the sixteenth report produced by Boyce Chartered Accountants in conjunction with the Cotton Research & Development Corporation (CRDC). From 1986 to 2004 the report was compiled independently by Boyce. Having over 30 years of data in the same format for any industry is a valuable resource.

The primary purpose of the ACCA is to show the income and expenses associated with growing fully irrigated cotton on a per hectare and per bale basis. To get the most out of this report, the reader should be fully aware of the methodology adopted and in particular, understand the following:

- The analysis does not necessarily show the health of the cotton industry. Where a cotton grower grew skip-row cotton or solid cotton that did not receive full water or grew no fully irrigated cotton at all, those resulting figures are excluded from the analysis. In most, if not all cases, these alternate crops would have returned a reduced profit per hectare in comparison to growing fully irrigated cotton. Therefore, although the grower may have made a healthy per hectare profit on the hectares of fully irrigated solid cotton grown, the net profit of the total farm would have been significantly less than if fully irrigated cotton was grown across the full area, allowing for usual rotation practice.
- The figures show the average results of participants in the sample. For example, assume there were only two participants in the sample who grew the same area of irrigated cotton. If one uses contractors for picking and the other owns their pickers, the figure for contract picking will be approximately 50% of the market rate. Similarly, the figures on a per line basis for expenses such as depreciation, repairs & maintenance, wages etc. will all be less than market rates. With this knowledge, users of this information can get additional information from this analysis.
- If there is a significant change in per line figures, this may not necessarily be due to a price increase. Line items can be made up of price, the frequency of operation and the volume of input per operation. So where there has been an increase in, for example, seed this could be due to price, the number of seeds per metre planted (volume) or the number of plantings, or a combination of all three.
- Where a crop has not been picked due to flooding or some other disaster other than hail, the expenses relating to the affected area have been excluded from the sample.

So, care should be taken when using the results from this analysis. Understanding the basis on which the analysis is constructed is the key to getting the most out of this study.

1.1 Our sample

The analysis includes the results for growers who were able to plant, grow and pick their crop using close to standard irrigation practices. This year the total number of hectares in the sample is still down compared to 2019 due to less cotton grown throughout many of the cotton-growing areas of Australia, leading to fewer participants.

The average hectares planted per participant increased from 526 hectares in 2020 to 928 hectares in 2021 due to the improved growing conditions experienced by irrigators with the main factor being the increased availability water. The total number of hectares in the sample was 13,928.

The total number of bales in the sample was 164,575 in 2021 and 30,615 in 2020 (compared to 165,012 in 2019), which represented approximately 7% of total Australian cotton production (compared to 8% of total Australian cotton production in 2019). Australia's total number of bales produced in 2021 is an estimated 2,809,345 (Cotton Australia statistics).

Marketing is an important part of Grower management and can make a significant contribution to the profitability of a cotton farm. For this reason, participants' overall results in the 'Comparison of average income and expense items' are not normalised with respect to income. While recognising marketing as an important part of management, our study does not include or exclude growers from the Top 20% Growers based on marketing decisions with respect to currency, lint and basis. Our view is that growers should be classified into (or out of) this group based on yield and cost only, as many growers review their operation against the Top 20% Growers to look for areas of improvement. We have therefore selected the top 20% substituting \$599 (the average 2021 net price for all participants) for the average net price that the individual grower actually received.

It should be noted that although the average price of \$599 was used to select the participants in the Top 20% Growers, the growers' actual sales figures are reported in this analysis.

1.2 The need to benchmark

Financial analysis using comparative statistics helps farmers identify relative strengths and weaknesses; accompanying budgets and long term business plans will then focus on ways to overcome weaknesses and build on strengths. In other words, this Comparative Analysis is a management tool to implement change and to identify where effort should be directed on a day to day basis.

This analysis does not provide all the answers - it is a benchmark or a standard to strive for. It is up to management to develop and implement specific action plans based on improved knowledge to set and achieve new goals.

The reliable, independent figures in the Comparative Analysis provide the starting point for farmers to develop "best practice".

This analysis has been running since 1986 so if growers or other interested parties require more long term data and analysis, please contact us to discuss the results and to clarify any queries so that we all develop a deeper understanding of the industry.

2 Comparative Statistics



2.1 Summary

2.1.1 Comparison of average income and expense items for the 2021 year

	ALL FARMS	TOP 20%	BOTTOM 20%	LOW COST	GROWERS (>2,000 HA)	DIFFERENCE AVG v TOP 20%
INCOME						
Cotton proceeds - Lint	6,417	7,247	5,414	6,416	6,436	830
Cotton proceeds - Seed	950	1,061	908	942	934	111
Ginning	(713)	(792)	(717)	(719)	(711)	(79)
Levies	(50)	(55)	(54)	(49)	(51)	(5)
Cotton proceeds - Hail claims	0	0	0	0	0	0
	6,604	7,461	5,551	6,590	6,608	857
EXPENSES						
Cartage	96	85	120	104	98	(11)
Chemical application	178	137	197	151	171	(41)
Chemicals - Defoliant	79	87	74	82	81	8
Chemicals - Herbicides	156	120	105	146	166	(36)
Chemicals - Insecticides	72	79	62	83	62	7
Chemicals - Others	36	37	25	37	34	1
Chipping	1	1	0	1	0	0
Consultants	45	27	85	41	41	(18)
Contract Picking	214	127	270	223	200	(87)
Contract farming and ripping	111	32	107	108	94	(79)
Cotton picking wrap and sundries	119	147	114	118	123	28
Depreciation	260	269	465	193	238	9
Electricity	85	57	55	69	77	(28)
Fertiliser	482	521	569	457	473	39
Fuel and oil	258	170	193	220	249	(88)
Hire of plant	47	6	67	30	54	(41)
Insurance	83	109	80	83	78	26
Licence fee - Bollgard	356	355	363	359	357	(1)
Licence fee - Roundup Ready	52	56	51	50	57	4
Motor vehicle expenses	25	37	27	27	26	12
R & M - Farming plant	207	204	447	172	217	(3)
R & M - Pumps and earthworks	108	73	111	88	110	(35)
Seed	125	102	146	122	122	(23)
Water charges and purchases	384	197	1,425	280	334	(187)
Wages - Employees	351	424	425	331	372	73
Wages - Proprietors	8	9	0	11	0	1
Administration	53	25	150	56	41	(28)
Other farm overheads	128	46	128	121	103	(82)
	4,119	3,539	5,861	3,763	3,978	(580)
OPERATING PROFIT/(LOSS) (BEFORE INTEREST AND WAGES)	2,485	3,922	(310)	2,827	2,630	1,437
ADD:						
Wages - Proprietors	8	9	0	11	0	1
OPERATING PROFIT/(LOSS) (BEFORE INTEREST)	2,493	3,931	(310)	2,838	2,630	1,438

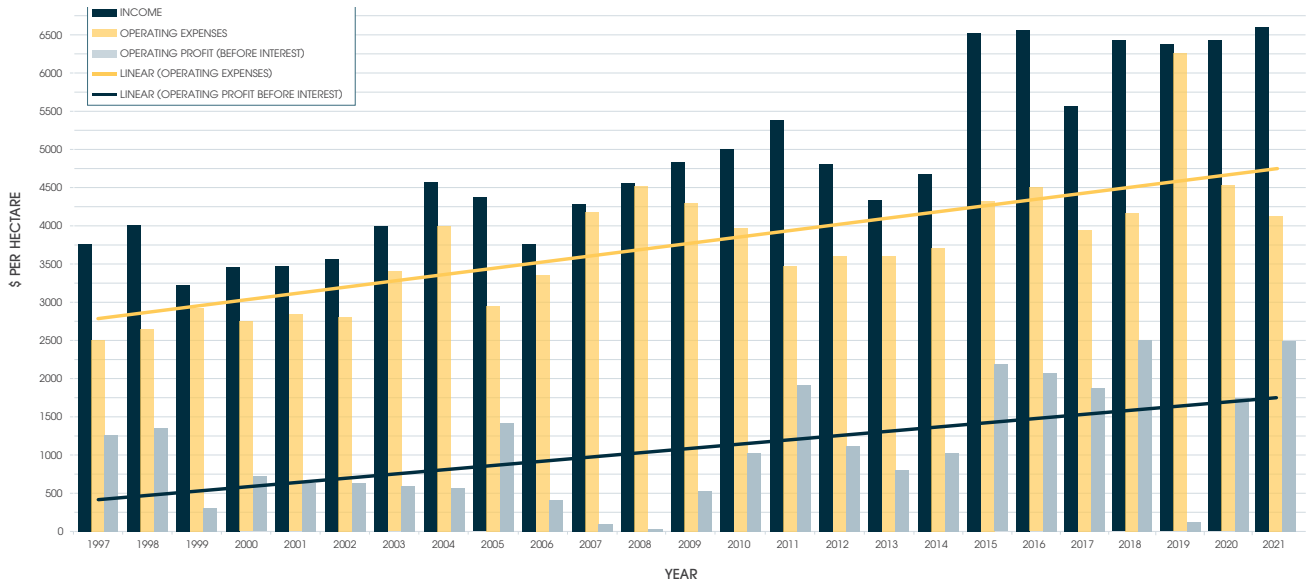
2.1.1 Comparison of average income and expense items for the 2021 year (continued)

continued	ALL FARMS	TOP 20%	BOTTOM 20%	LOW COST	GROWERS (>2,000 HA)	DIFFERENCE AVG v TOP 20%
DEDUCT:						
Interest and bank charges	121	116	671	99	66	(5)
Interest - Crop terms	0	0	0	0	0	0
	121	116	671	99	66	(5)
NET OPERATING PROFIT/(LOSS)	2,372	3,815	(981)	2,739	2,564	1,443
CROP RESULTS (AVERAGE)						
Hectares of cotton grown	928.52	1,732.67	235.38	1,039.37	2,268.97	804.14
Total yield	10,971.66	22,896.66	2,442.33	12,261.59	26,931.59	11,925.00
Yield per hectare (bales)	11.82	13.21	10.38	11.80	11.87	1.39
Value per bale	558.85	564.60	534.99	558.52	556.68	5.75
Cost of production per bale	348.66	267.81	564.77	319.14	334.98	(80.85)
Operating profit/(loss) per bale	210.18	296.79	(29.78)	239.37	221.70	86.61
No. of bales per/ha required to cover operating expenses	7.37	6.27	10.95	6.74	7.14	(1.10)
No. of bales per/ha required to cover total expenses	7.59	6.47	12.21	6.92	7.26	(1.12)

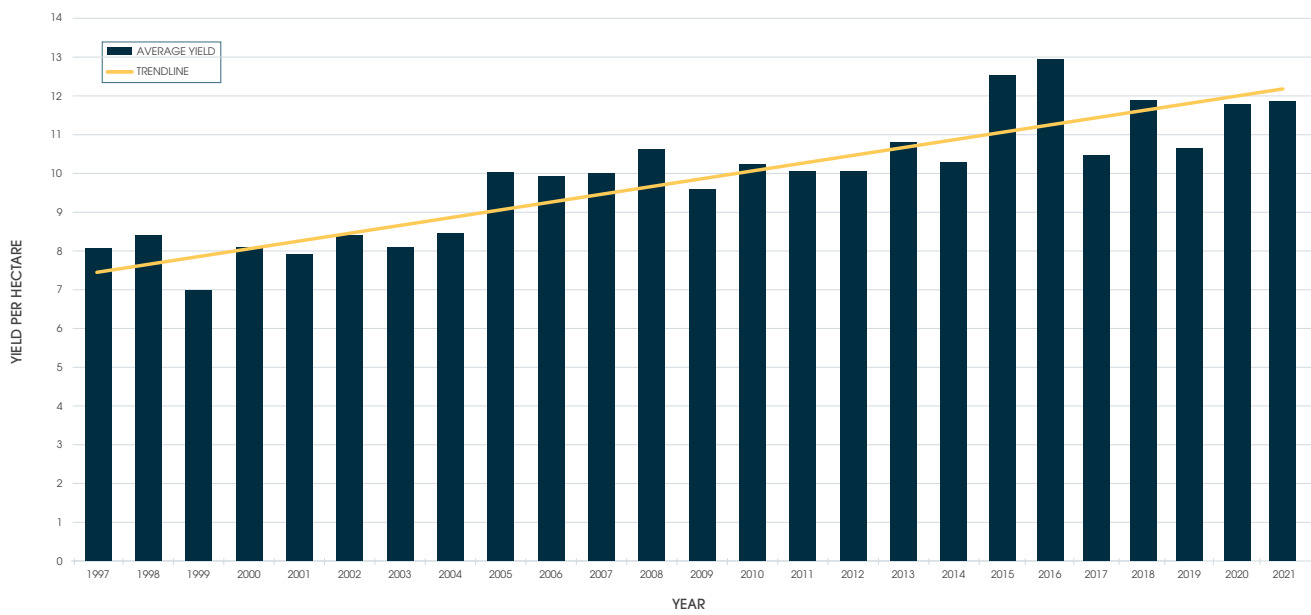
2.2 Average growers per hectare

2.2.1 Graphs

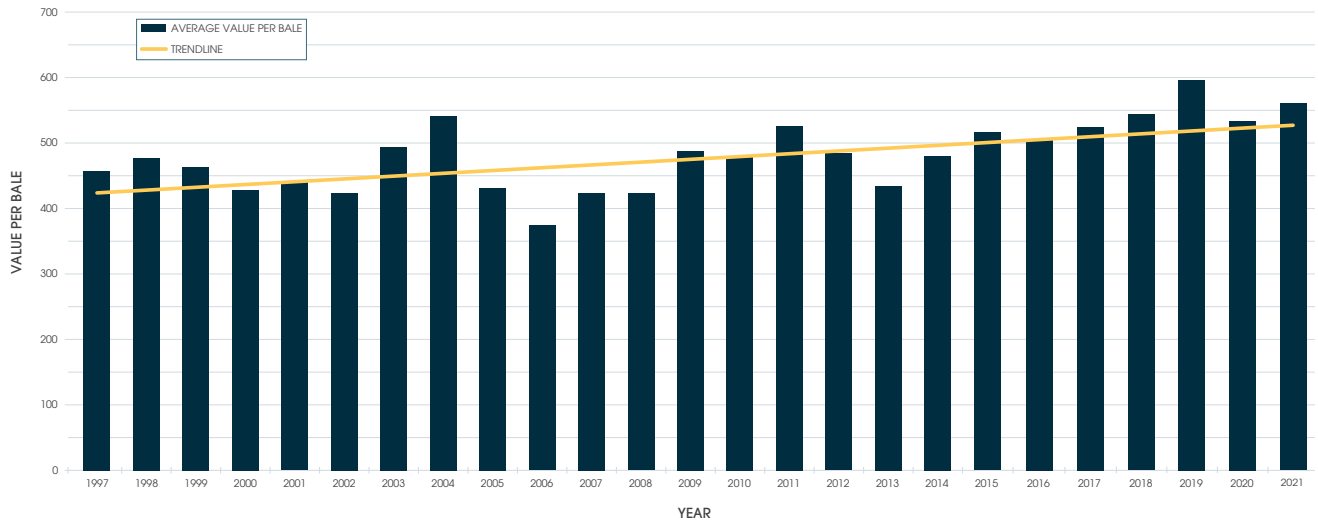
2.2.1.1 Comparison of average income and expense items



2.2.1.2 Yield and trendline



2.2.1.3 Value per bale and trendline



2.2.2 Comparison of average income and expense items for the past 10 years

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	5YR AV
	\$/Ha	\$/Ha	\$/Ha	\$/Ha	\$/Ha	\$/Ha	\$/Ha	\$/Ha	\$/Ha	\$/Ha	\$/Ha
INCOME											
Cotton proceeds – Lint	4,866	4,712	4,709	6,133	6,449	5,404	6,339	5,897	5,587	6,417	5,929
Cotton proceeds – Seed	400	524	805	1,180	917	833	809	1,151	1,334	950	1,015
Ginning	(512)	(630)	(621)	(744)	(752)	(621)	(698)	(639)	(622)	(713)	(659)
Levies	(31)	(36)	(46)	(54)	(49)	(41)	(45)	(40)	(44)	(50)	(44)
Cotton proceeds – Hail claims	70	17	57	10	0	0	4	0	0	0	1
	4,793	4,587	4,904	6,525	6,565	5,575	6,409	6,369	6,255	6,604	6,242
EXPENSES											
Cartage	117	132	86	106	103	87	92	86	103	96	93
Chemical application	131	106	151	146	184	180	154	149	187	178	170
Chemicals – Defoliant	53	42	49	61	51	64	42	62	75	79	64
Chemicals – Herbicides	85	84	115	116	153	137	105	131	142	156	134
Chemicals – Insecticides	84	35	81	112	164	155	135	108	66	72	107
Chemicals – Others	7	5	4	6	10	7	10	12	18	36	17
Chipping	3	3	2	1	9	2	1	2	0	1	1
Consultants	57	52	43	45	86	52	50	61	233	45	88
Contract Picking	241	176	182	151	145	129	135	182	294	214	191
Contract farming and ripping	164	215	100	102	156	163	127	167	165	111	147
Cotton picking wrap and sundries	84	78	75	104	131	114	106	104	47	119	98
Depreciation	178	227	249	354	298	211	206	397	381	260	291
Electricity	29	45	50	104	109	51	49	80	204	85	94
Fertiliser	517	546	533	478	591	455	482	664	580	482	533
Fuel and oil	271	403	380	377	273	242	315	475	587	258	375
Hire of plant	43	32	52	39	26	17	20	60	22	47	33
Insurance	123	110	104	116	112	113	106	81	184	83	113
Licence fee – Bollgard	292	310	305	270	302	301	311	311	387	356	333
Licence fee – Roundup Ready	56	39	69	69	62	73	76	76	12	52	58
Motor vehicle expenses	19	19	19	23	26	22	18	33	28	25	25
R & M – Farming plant	109	123	113	159	162	203	156	434	188	207	238
R & M – Pumps and earthworks	84	130	159	217	179	84	103	190	185	108	134
Seed	146	107	79	140	120	131	126	129	138	125	130
Water charges and purchases	141	160	306	343	310	245	359	1,275	974	384	647
Wages – Employees	344	380	391	514	547	314	379	515	656	351	443
Wages - Proprietors	21	31	17	25	27	27	32	56	32	8	31
Administration	47	52	56	93	57	41	58	76	128	53	71
Other farm overheads	155	166	148	92	107	102	143	352	308	128	207
	3,601	3,808	3,918	4,363	4,500	3,722	3,896	6,268	6,324	4,119	4,866
OPERATING PROFIT/(LOSS) (BEFORE INTEREST AND WAGES)	1,192	779	986	2,162	2,065	1,853	2,513	101	(69)	2,485	1,377
ADD:											
Wages - Proprietors	21	31	17	25	27	27	32	56	32	8	31
OPERATING PROFIT/(LOSS) (BEFORE INTEREST)	1,213	810	1,003	2,187	2,092	1,880	2,545	157	(37)	2,493	1,408

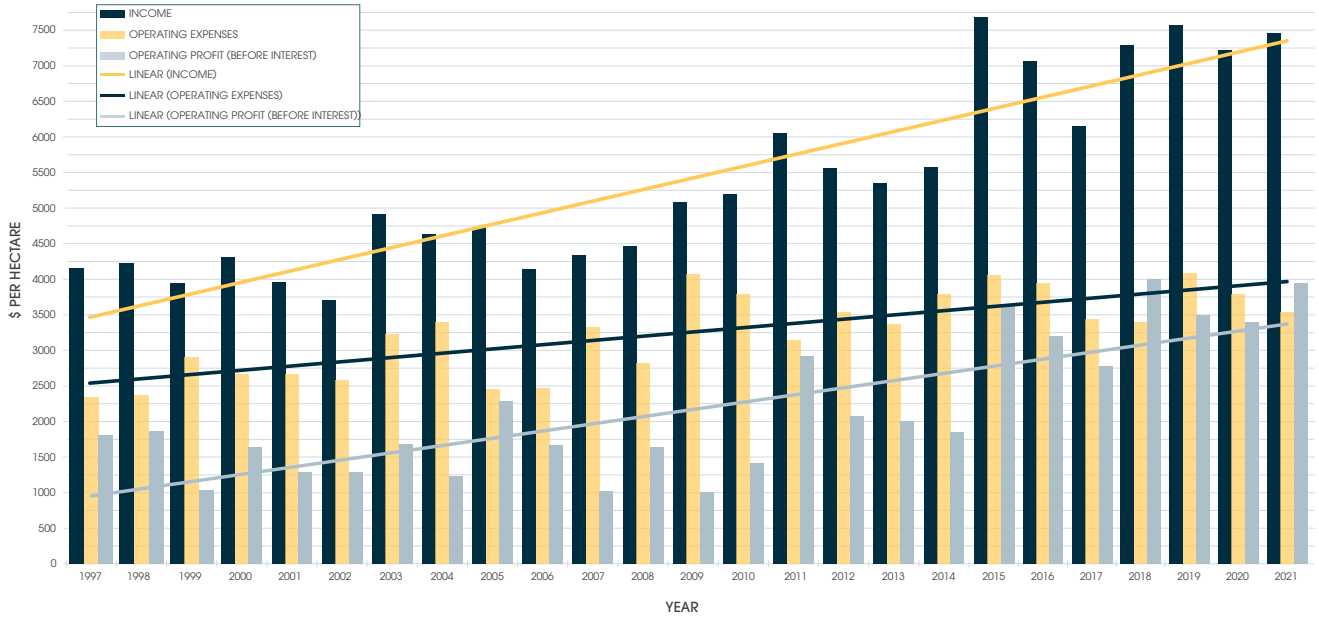
2.2.2 Comparison of average income and expense items for the past 10 years (continued)

continued	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	5YR AV
DEDUCT:											
Interest and bank charges	409	389	292	288	385	322	311	313	807	121	375
Interest - Crop terms	0	11	0	0	1	1	0	0	0	0	0
	409	400	292	288	386	323	311	313	807	121	375
NET OPERATING PROFIT/(LOSS)	804	410	711	1,899	1,706	1,557	2,234	(156)	(844)	2,372	1,033
CROP RESULTS (AVERAGE)											
Hectares of cotton grown	1,675.67	1,517.64	1,593.12	926.11	878.11	1,206.53	1,140.69	617.64	526.28	928.52	883.93
Total yield	16,272.11	16,223.03	16,320.98	11,660.33	11,368.18	12,773.17	13,484.45	6,600.48	5,102.57	10,971.66	9,786.46
Yield per hectare (bales)	9.71	10.69	10.24	12.59	12.95	10.59	11.82	10.69	9.70	11.82	10.92
Value per bale	486.42	427.44	473.05	517.48	507.15	526.66	541.77	596.01	645.14	558.85	573.69
Cost of production per bale	370.77	356.27	382.31	346.53	347.51	351.48	329.73	586.58	652.17	348.66	453.72
Operating profit/(loss) per bale	122.89	72.75	96.31	171.72	159.68	175.23	212.36	9.43	(7.04)	210.18	120.03
No. of bales per/ha required to cover operating expenses	7.40	8.91	8.28	8.43	8.87	7.07	7.19	10.52	9.80	7.37	8.39
No. of bales per/ha required to cover total expenses	8.24	9.85	8.90	8.99	9.63	7.68	7.77	11.04	11.05	7.59	9.03

2.3 Top 20% growers per hectare

2.3.1 Graph

2.3.1.1 Comparison of average income and expense items



2.3.2 Comparison of average income and expense items for the past 10 years

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	5YR AV
INCOME											
Cotton proceeds – Lint	5,509	5,502	5,270	7,071	6,743	5,988	7,334	6,936	6,272	7,247	6,755
Cotton proceeds – Seed	484	629	1,046	1,467	1,174	933	782	1,468	1,048	1,061	1,058
Ginning	(478)	(740)	(677)	(789)	(773)	(638)	(742)	(748)	(630)	(792)	(710)
Levies	(40)	(49)	(41)	(54)	(50)	(45)	(48)	(49)	(45)	(55)	(48)
Cotton proceeds – Hail claims	112	33	9	0	0	0	0	0	0	0	0
	5,587	5,375	5,607	7,695	7,094	6,238	7,326	7,607	6,645	7,461	7,055
EXPENSES											
Cartage	114	166	113	74	96	115	127	79	133	85	108
Chemical application	125	96	142	148	184	215	181	136	180	137	170
Chemicals – Defoliant	54	51	57	58	69	71	48	105	61	87	74
Chemicals – Herbicides	61	66	152	140	112	156	123	108	142	120	130
Chemicals – Insecticides	89	58	126	174	117	241	185	95	66	79	133
Chemicals – Others	10	8	4	10	25	9	9	3	15	37	15
Chipping	6	4	2	1	3	7	5	3	0	1	3
Consultants	71	51	61	70	63	81	77	89	199	27	95
Contract Picking	292	237	153	144	270	78	148	155	389	127	179
Contract farming and ripping	114	208	154	152	106	190	103	32	207	32	113
Cotton picking wrap and sundries	64	98	90	98	159	137	124	148	31	147	117
Depreciation	183	158	226	411	145	164	113	321	122	269	198
Electricity	20	93	13	31	166	42	29	107	93	57	66
Fertiliser	544	453	580	485	609	432	511	566	513	521	509
Fuel and oil	233	244	418	349	141	189	238	298	658	170	311
Hire of plant	6	16	42	1	6	5	2	4	0	6	3
Insurance	125	94	90	159	107	141	153	56	188	109	129
Licence fee – Bollgard	287	305	300	192	305	301	308	330	397	355	338
Licence fee – Roundup Ready	51	42	69	63	74	73	76	75	0	56	56
Motor vehicle expenses	25	14	12	14	25	15	10	55	26	37	29
R & M – Farming plant	66	103	118	146	115	184	59	230	113	204	158
R & M – Pumps and earthworks	122	119	174	334	95	33	24	273	185	73	118
Seed	136	103	87	154	123	121	119	107	144	102	119
Water charges and purchases	126	150	238	184	90	147	204	191	8	197	149
Wages – Employees	300	269	277	338	628	193	272	289	493	424	334
Wages - Proprietors	27	27	8	12	25	11	8	102	0	9	26
Administration	39	70	29	33	27	29	44	50	84	25	46
Other farm overheads	234	68	31	87	38	67	78	101	270	46	112
	3,524	3,371	3,766	4,062	3,923	3,447	3,378	4,108	4,717	3,539	3,838
OPERATING PROFIT/(LOSS) (BEFORE INTEREST AND WAGES)	2,063	2,004	1,841	3,633	3,171	2,791	3,948	3,499	1,928	3,922	3,218
ADD:											
Wages - Proprietors	27	27	8	12	25	11	8	102	0	9	26
OPERATING PROFIT/(LOSS) (BEFORE INTEREST)	2,090	2,031	1,849	3,645	3,196	2,802	3,956	3,601	1,928	3,931	3,244

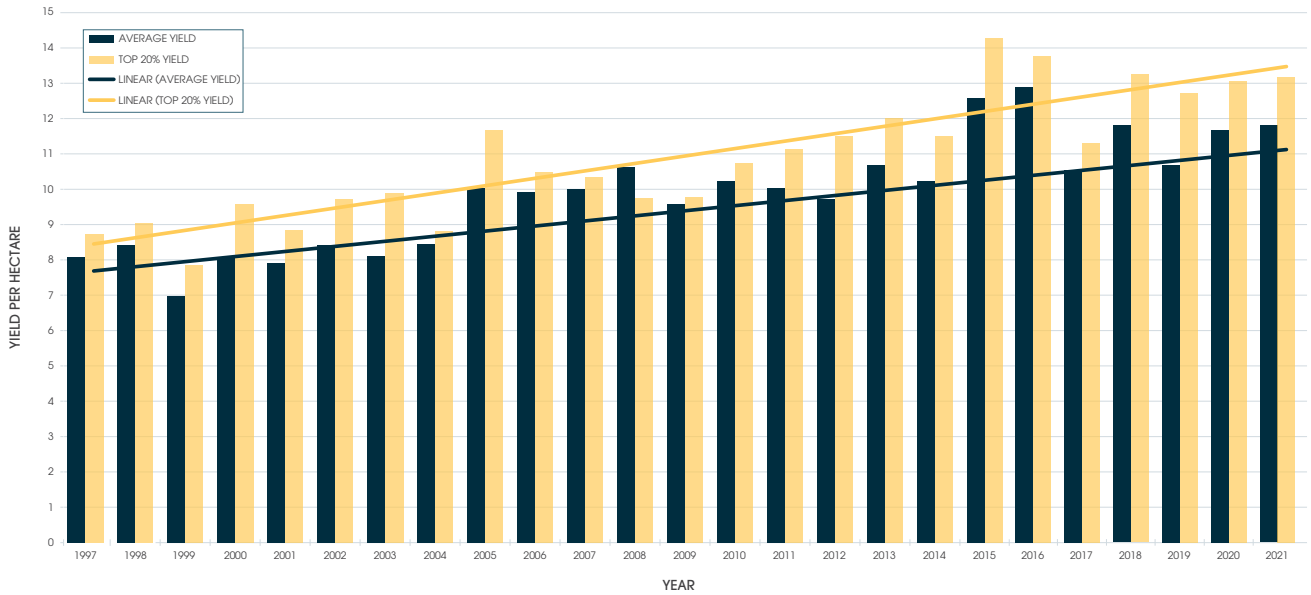
2.3.2 Comparison of average income and expense items for the past 10 years (continued)

continued	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	5YR AV
DEDUCT:											
Interest and bank charges	353	496	306	257	37	210	135	86	361	116	182
Interest - Crop terms	0	0	0	0	0	0	0	0	0	0	0
	353	496	306	257	37	210	135	86	361	116	182
NET OPERATING PROFIT/(LOSS)	1,737	1,535	1,543	3,388	3,159	2,592	3,821	3,515	1,567	3,815	3,062
CROP RESULTS (AVERAGE)											
Hectares of cotton grown	1,186.93	833.94	2,365.17	997.79	838.00	1,211.00	1,076.93	311.40	763.74	1,732.67	1,019.15
Total yield	13,596.12	9,999.47	27,308.14	14,283.13	11,473.66	13,749.49	14,351.33	3,968.52	7,774.06	22,896.66	12,548.01
Yield per hectare (bales)	11.45	11.99	11.55	14.31	13.69	11.35	13.33	12.74	10.18	13.21	12.16
Value per bale	477.90	445.47	484.87	537.62	518.14	549.34	549.73	596.88	652.71	564.60	582.65
Cost of production per bale	307.69	281.13	326.34	283.59	286.43	303.47	253.50	322.20	463.38	267.81	322.07
Operating profit per bale	180.02	167.08	159.32	254.03	231.70	245.87	296.23	274.68	189.33	296.79	260.58
No. of bales per/ha required to cover operating expenses	7.37	7.57	7.77	7.55	7.57	6.27	6.15	6.88	7.23	6.27	6.56
No. of bales per/ha required to cover total expenses	8.12	8.68	8.40	8.03	7.64	6.65	6.39	7.02	7.78	6.47	6.86

2.4 Top 20% growers versus average growers per hectare

2.4.1 Graphs

2.4.1.1 Comparison of yield



2.4.2 Comparison of top 20% growers and average growers for the past five years (2017, 2018, 2019, 2020, 2021)

	ALL FARMS AVERAGE	TOP 20% AVERAGE	DIFFERENCE
INCOME			
Cotton proceeds - Lint	5,929	6,755	827
Cotton proceeds - Seed	1,015	1,058	43
Ginning	(659)	(710)	(51)
Levies	(44)	(48)	(4)
Cotton proceeds - Hail claims	1	0	(1)
	6,242	7,055	813
EXPENSES			
Cartage	93	108	(15)
Chemical application	170	170	(0)
Chemicals - Defoliant	64	74	(10)
Chemicals - Herbicides	134	130	4
Chemicals - Insecticides	107	133	(26)
Chemicals - Others	17	15	2
Chipping	1	3	(2)
Consultants	88	95	(6)
Contract Picking	191	179	11
Contract farming and ripping	147	113	34
Cotton picking wrap and sundries	98	117	(19)
Depreciation	291	198	93
Electricity	94	66	28
Fertiliser	533	509	24
Fuel and oil	375	311	65
Hire of plant	33	3	30
Insurance	113	129	(16)
Licence fee - Bollgard	333	338	(5)
Licence fee - Roundup Ready	58	56	2
Motor vehicle expenses	25	29	(3)
R & M - Farming plant	238	158	80
R & M - Pumps and earthworks	134	118	16
Seed	130	119	11
Water charges and purchases	647	149	498
Wages - Employees	443	334	109
Wages - Proprietors	31	26	5
Administration	71	46	25
Other farm overheads	207	112	94
	4,866	3,838	1,028
OPERATING PROFIT/(LOSS) (BEFORE INTEREST AND WAGES)	1,377	3,218	1,841
ADD:			
Wages - Proprietors	31	26	(5)
OPERATING PROFIT/(LOSS) (BEFORE INTEREST)	1,408	3,244	1,836

2.4.2 Comparison of top 20% growers and average growers for the past five years (2017, 2018, 2019, 2020, 2021) (continued)

	ALL FARMS AVERAGE	TOP 20% AVERAGE	DIFFERENCE
DEDUCT:			
Interest and bank charges	375	182	193
Interest - Crop terms	0	0	0
	375	182	193
NET OPERATING PROFIT/(LOSS)	1,033	3,062	2,029
CROP RESULTS (AVERAGE)			
Hectares of cotton grown	617.64	1,019.15	401.50
Total yield	6,600.48	12,548.01	5,947.53
Yield per hectare (bales)	10.69	12.16	1.47
Value per bale	596.01	582.65	(13.36)
Cost of production per bale	586.58	322.07	264.51
Operating profit per bale	9.43	260.58	251.15
No. of bales per/ha required to cover operating expenses	10.52	6.56	3.96
No. of bales per/ha required to cover total expenses	11.04	6.86	4.18

3 Appendices



Appendix A

Definition of terms

Top 20% Growers (Average)

These figures represent the average results of those growers who achieved the highest farm operating profit (after using an average cotton price for all growers).

Best "Low Cost" Growers

These figures represent the average results of those growers who had the lowest farm operating expenses (before interest).

Large Growers

These figures represent the average results of those growers who grew more than 2,000 hectares.

Combined Average of five years to 2021

These figures represent the average of the annual results of farmers in each category of the comparative analysis, over a five year period. We have also analysed the combined average of the Top 20% Growers for comparative purposes.

Labour

These figures include all permanent employees or equivalent casuals (two casuals employed for three months each would represent half of a permanent employee). Proprietors have been excluded.

Available Tractor Horse Power (Engine)

Includes all field tractors used for ripping, listing, spraying and cultivating, but excludes tractors used to operate module builders.

Available Picking Capacity

Only includes pickers owned by the grower.

Rotation

The portion of the current year's crop grown on fields fallowed in the previous year, or developed over the past four years, expressed as a percentage.

Water Usage

Includes the total mega litres of irrigation water used to grow the crop as well as the impact of beneficial rain. Rainfall figures during the growing season have been converted to mega litres after excluding light falls and a portion of falls over 100 mm per month.

Appendix B

Guide to income and expense allocations

COTTON PROCEEDS

Cotton Proceeds – Lint is net of premiums and discounts.

For growers who received hail insurance claims, the amount received has been shown separately in the analysis. Where possible the hail claim has been grossed up to reflect the bales lost due to hail and the costs saved or additional costs incurred have been added or subtracted to reflect comparable figures.

EXPENSES

Cartage	cartage (cotton module cartage, general cartage)
Chemical application	application by aircraft, application by ground rig
Chemicals – Defoliants	all defoliants and conditioners
Chemicals – Herbicides	herbicides used in field and on ditches, channels etc.
Chemicals – Insecticides	all insecticides
Chemicals – Other	growth regulants (pix) and all other chemicals
Chipping	chipping (chipping contractors, chipping wages), row weeders
Consultants	consultants (external and internal agronomist, bug checkers, marketing consultants)
Contract picking	contract picking (net of contract picking income on a swap basis, ie. hectare for hectare)
Contract farming and ripping	contract farming, contract ripping, contract stalk pulling, stick picking
Cotton wrap and picking sundries	cotton wrap and sundries (tarps and ropes, repairs to tarps)
Depreciation	depreciation (management depreciation, not taxation depreciation, for example temporary full expensing depreciation was not used)
Electricity	electricity (electricity for bores, general electricity)
Fertiliser	fertiliser, gypsum
Fuel and oil	fuel and oil (net of diesel fuel rebate)
Hire of plant	hire of plant
Insurance	crop insurance, general insurance
Licence fee – Bollgard	licence fees paid to Monsanto for the Bollgard licence
Licence fee – Roundup Ready	licence fees paid to Monsanto for the Roundup Ready licence
Motor vehicle expenses	motor vehicle expenses (registration, motor vehicle insurance, R & M motor vehicle)

R & M – Farming plant	R & M pickers, R & M plant, R & M tractors, R & M small tools and hardware, R & M motor bikes
R & M – Pumps and earthworks	R & M irrigation earthworks, R & M irrigation pumps and motors
Seed	seed
Water charges and purchases	water charges (charges from a state body, charges from a local water scheme) and water purchases
Wages – Employees	external wages (excluding chipping), payroll tax, secretarial fees, superannuation, workers compensation insurance, FBT
Wages – Proprietors	wages paid to a proprietor. If no wage is paid a notional amount, based on their involvement in the operation, has been included for each working proprietor. If the farm has more than one enterprise, the proprietors wage is split in accordance with normal allocation criteria
Administration	accountancy (all general work), administration, advertising, computer costs, computer processing, entertainment, filing fees, licences permits and fees, medical supplies, newspapers and periodicals, printing stationery and postage, protective clothing, seminars and conferences, staff amenities, staff training, subscriptions and donations, telephone, travel and accommodation
Other farm overheads	special accountancy work, audit, legal, rates, rent, R & M homestead, R & M employees' houses, R & M farm buildings, R & M fences, shade and shelter trees
Interest and bank charges	bank charges, borrowing expenses, bank interest, leasing, and hire purchase interest charges
Interest – Crop terms	interest on crop term finance (chemical suppliers and cotton merchants etc)

Cotton Research and Development Corporation

2 Lloyd St
(PO Box 282)
Narrabri NSW 2390

Tel: (02) 6792 4088
Fax: (02) 6792 4400
Email: crdc@crdc.com.au

www.crdc.com.au

Boyce Chartered Accountants

Moree | Cooma | Dubbo | Goulburn | Wagga Wagga
39 Albert St
Moree NSW 2400

Tel: (02) 6751 2000
Email: infomorree@boyceca.com

www.boyceca.com

Liability limited by a scheme approved under Professional Standards Legislation.

